

Knapp. (H.)

Remarks of some
practical points concerning
Cataract extraction.



REMARKS

ON SOME

Practical Points concerning Cataract Extraction.

BY

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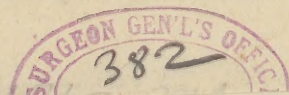
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By personal intercourse with members of the profession and the perusal of the American medical press, I learn that in this country a greater divergence of opinion than there should be, still exists with regard to the best modes of cataract operation. I am, you know, an advocate of Græfe's peripheric linear extraction, which I continue to practice with results more satisfactory than I obtained by any method I practised in former years. In the hope of encouraging an exchange of opinion, I beg, Mr. President, to make some remarks on Græfe's method of extraction, which have been suggested principally by the experience derived from the operations I performed in New York.

During the last fourteen months, I have made, at the New York Ophthalmic and Aural Institute, 27 extractions. Two of them were complete failures, the one by suppuration of the flap, the other by purulent iritis. The operations in both these cases had been unexceptionable. The remaining twentyfive cases were complete successes, no so-called half or moderate success having occurred.

With regard to the *form of the knife*, I prefer instruments with *blades as narrow as possible*. They are better adapted to the execution of a linear section than broader instruments, and can be pushed with facility through the anterior chamber, allowing of a partial withdrawal, if their point become engaged in the iris, or the counterpuncture be made not exactly where it should be. Those who lay more stress upon the peripheral position than on the linear direction of the wound, may just as well choose instruments with larger blades, of which every variety, between Græfe's and Beer's knives, has been fabricated and met with local favor.

The *sharpness of the cutting edge* is of the greatest importance in obtaining a regular and smooth section. The section should be executed completely by a single forward and backward movement of the knife.



Every additional motion is sawing, which renders the section angular, its surface uneven, and causes more or less unnecessary traction and bruising. It seems to be more difficult to render a narrow blade perfectly sharp than a broad one. I have given this point particular attention, and find that blades with convex surfaces, as in Beer's knives, are the worst of all. Instruments with plain surfaces may cut well enough, but the best cutting-edge is obtained by making the surfaces of the cataract knife concave, like those of a razor. This I knew long ago, but thought that the narrowness of our instrument would be an obstacle, and so, also, I was told by several makers. Lately, however, Messrs. Otto & Reynders, of New York, have made some cataract knives for me which are sharper than any I had ever before used. At my request, they have kindly given me some of them for presentation and distribution in this society, in order that these knives may be more extensively tried.

With regard to the *extent and position of the section*, I have often observed that tyros in this operation commonly make the section too small, which leads to very serious consequences, viz., difficult and unclean removal of the lens, bruising of the iris and cornea, place the wound too peripherically, lose vitreous, and provoke iritic and cyclitic processes. It would be preferable to place the middle of the wound entirely into the cornea, as some operators are accustomed to do, for this makes the procedure extremely easy, and is hardly ever followed by prolapse of vitreous. I make the section so that its middle lies between the tangent of the transparent margin of the cornea and a point 1 mm. distant from it. This, with some experience, affords a faultless execution of the section, and does not expose us to the dangers of a corneal wound.

The *laceration of the capsule* I effect in the following manner: After careful excision of the iris, I introduce the cystitome as far as the opposite border of the pupil, turn its point toward the capsule, and open the latter along the margin of the pupil, and along one side of the coloboma up to the corresponding angle of the wound, then turning the instrument on its flat side, I push it forward again to the opposite margin of the pupil, slit the capsule along the other margin of the colobema and the periphery of the cataract near the section. Then, in ordinary cases, I withdraw the instrument; but when the capsule is tough, I carry the cystitome again as far as the central point of the opposite pupillary border, rotate it about 45 degrees on its axis, seize the circumcised piece of capsule, and endeavor to draw it out with the point of the cystitome. I do not like to introduce the point of the cystitome beyond the visible limits of the pupil, behind the iris, as A. Weber and A. Von Graefe do, since I consider the just described mode of lacerating the capsule quite sufficient and think that it is prudent to come as little as possible in contact with

the iris. When the capsule is thickened in the centre, as is often the case in hypermature cataracts, I circumcise this thickened *plaque* in a similar way, as above described, and try to extract it with the cystitome. If this prove unsuccessful, I extract the circumcised thickened piece of capsule with a delicate pair of iris forceps. In this way that piece of the anterior capsule which is situate in the pupil is removed with the cataract in at least four-fifths of the cases, as those will testify who witnessed my operations. I always laid great stress on the removal of the anterior capsule, being convinced that thereby one of the principal causes of inflammatory reaction and opacification in the pupillary space is eliminated.

The careful opening of the capsule being of the greatest importance, no blood must be allowed to collect in the anterior chamber, as it would mask the point of the cystitome and render the rather delicate manœuvre uncertain. Hemorrhage into the anterior chamber occurs sometimes immediately after the corneo-sclerotic section, but more frequently after the excision of the iris. No attempt need be made to stop it, but the evacuation of the blood in the anterior chamber should be effected as soon as the excision of the iris is completed. Ordinarily I succeed in getting rid of the blood by pressing upon the cornea with a small piece of very soft wet sponge. If this fails, I take away the fixation forceps and lid-speculum, and press the blood out by rubbing the lower lid over the cornea, while, at the same time, depressing the posterior lip of the wound with the upper lid. After that I re-apply the speculum and fixation forceps, and proceed in the operation as if no hemorrhage had taken place.

In effecting the expulsion of the lens, I take care that the corticalis comes out, together with the nucleus, so that one movement of the spoon from the lower part of the cornea up to the centre of the wound removes the cataract completely. To render this possible, in cataracts with soft corticalis, I do not materially lessen the extent of the section, as I did formerly, when I brought the soft remnants out by rubbing of the cornea with the lower lid. This latter method of removing the "afterbirth" certainly clears the pupil, but my recent experience has made me suspect that it might prove prejudicial to the healing of the wound. In the few cases which I lost by suppuration of the flap, extensive rubbing had been resorted to; and to this manipulation alone could I ascribe the suppuration. But, Mr. President, we must not forget that the remote and proximate causes of the suppuration of the flap have always been a mystery, baffling, not infrequently, our most confident hopes after the smoothest operations.

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ATLAS
OF
SKIN DISEASES

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